BRITISH VIRGIN ISLANDS.

REPORT

OF THE

Department of Agriculture

FOR THE YEAR

1953.

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Section I:

REVIEW OF AGRICULTURAL PRODUCTION:

1. Weather Conditions:

On the whole weather conditions were not ideal for agriculture. March, June and September were slightly wetter than the average but the remaining months were well below average and the islands experienced drought conditions from January to early June. September with a total of 13.05 inches proved to be the wettest month, and the 8th September the wettest day when 6.00 inches was recorded.

Total rainfall amounted to 47.71 inches which is 5.53 inches below the average for the last 10 years. This marks 1953 as the driest year since 1945 and 1946.

The hurricane season, July—October, passed without any hurricanes being recorded in the Virgin Islands area.

A slight earth tremor was noted in Tortola on the 28th October.

In Appendix I the annual rainfall for the years 1943—1953 and the monthly average based on this period are given.

2. Production:

Estate agriculture as practised in the other presidencies is unknown in the British Virgin Islands. Production is by small farmers who do most of the work themselves. Food crops are mainly for local consumption whereas the bulk of the livestock produced is exported.

There is some Crown Land and there are a few syndicate estates but the greater part of the land is owned by the cultivators. The local system of land tenure continues unchanged.

Co-operative societies are non-existent in the Presidency.

3. Sugar:

Actually no sugar is manufactured in the Presidency but the sugar cane grown is turned into syrup for the manufacture of rum. Some 8 pot stills are engaged in this minor industry.

It is difficult to estimate the actual area planted under sugar cane, the plots being small and scattered. It does however appear that there was an increase over the 1952 estimates of 80 acres, and the export of rum shows a considerable increase both in quantity and value.

4. Cotton:

The Sea Island Cotton industry was revived in 1936 and continued for a few years. The area planted was usually under 100 acres and yields were poor due largely to the ravages of the Cotton Stainer. More recently, 1948-49, another attempt was made to grow cotton, but again proved a failure and with the devaluation of the pound all incentive disappeared. It is unlikely that cotton will ever claim a place as an industry in the presidency.

5. Limes:

Fresh limes to the value of $213.00 were exported to St. Thomas during the year. The area under this crop remained unchanged.

6. Coconuts:

33,125 dry and water nuts were exported to the American Virgin Islands during 1953. There is a good demand for coconuts and some farmers have been extending their area under this crop slightly.

7. Bananas:

Cultivation of bananas has shown some increase in recent years and bids fair to become an important minor industry. Exports for the year amounted to 5,487 stems.

8. Food Crops:

Ground provisions, pulses and vegetables were in short supply during the first half of the year as a result of the drought. With the rains in June and September the situation improved somewhat and by the end of the year supplies were once more available for local consumption and for export. On the whole, production was greatly below that of 1952. There was an increased demand for vegetable seedlings in December, the varieties most sought being tomato, onion, cabbage and sweet pepper.

9. Livestock:

Exports were consigned to St. Thomas (Virgin Islands of the U.S.A.), Puerto Rico, the French West Indies and the Leeward Islands. In April exports of cattle, sheep and goats to the Virgin Islands of the U.S.A. and Puerto Rico were halted following the discovery of a fever tick on a bull shipped to Puerto Rico. After representations had been made shipment of sheep and goats to St. Thomas only was resumed in September. Swine were permitted to enter both Puerto Rico and St. Thomas freely. As a result exports of cattle, sheep and goats to Puerto Rico and St. Thomas were con-

siderably less when compared with 1951 and 1952. Exports of cattle to the French West Indies rose by over 100%. Total exports of swine showed a marked increase of 16.6% over the preceding year.

There was no change in the price received for cattle, sheep and goats which remained at 12c. per lb. (U.S.C.) liveweight. The price for swine increased from 13c. to 14c. or 15c. per lb. (U.S.C.).

No outbreaks of hog cholera occurred during the year. Inoculations with hog cholera vaccine as a precaution against this disease were carried out as a routine measure, and there was a marked increase over the preceding year. In 1952 inoculations numbered 750 and in 1953 the total was 1,470 as follows:—

Tortola	1,245
Virgin Gorda	96
Jost Van Dykes	88
Anegada	41
Total	1,470

Towards the end of the year a few cases of fever in cattle were reported which appeared from the symptoms to be Anaplasmosis. Smears were taken and forwarded to the Veterinary Department, St. Kitts, for identification.

The health and condition of all types of livestock were fairly good. Minor injuries received treatment and castrations of horses, mules, asses and cattle were performed.

10. Livestock Exports:

Table I sets out the number of animals exported during the year as compared with 1951 and 1952. In Table II the livestock exports are analysed according to type and sex.

TABLE I

Exports 1951—1953

Year	*Destination*	*Cattle*	*Sheep*	*Goats*	*Swine*	*Total*
1951	St. Thomas	1240	511	2002	522	4275
	French West Indies	267				267
	Puerto Rico					
	Dominica	32				32
	Totals	1539	511	2002	522	4574
1952	St. Thomas	963	445	1375	524	3307
	French West Indies	363				363
	Puerto Rico	106	6		59	171
	Totals	1432	451	1375	583	3841

TABLE I—(*cont'd*)

1953	St. Thomas	200	339	1033	445	2017
	French West Indies	797				797
	Puerto Rico	77			354	431
	Leeward Islands	15	7			22
	Totals	1089	346	1033	799	3267

TABLE II

TYPE & SEX ANALYSIS OF EXPORTS, 1953

Type	*Sex*	*No.*	*Total*
Cattle	Bulls	437	
	Steers	44	
	Cows	509	
	Heifers	99	1,089
Sheep	Rams	146	
	Wethers	1	
	Ewes	199	346
Goats	Bucks	460	
	Wethers	19	
	Does	554	1,033
Swine	Boars	56	
	Barrows	267	
	Sows & Shoats	476	799
Totals			3,267

Section II.

INVESTIGATIONAL WORK.

11. TROPICAL KUDZU:

Reference was made in the 1952 Report to the trial of Tropical Kudzu (*Pueraria Phaesoloides*) on hill side paddocks at the Agricultural Station for the protection of badly eroded areas. The seedlings grew well but were destroyed when cattle were turned into the paddock as they showed a special liking for this plant. This bears out the experience in other places that Tropical Kudzu cannot stand heavy grazing.

12. LIVING FENCES:

An observation trial with Sweet Lime as a living fence for livestock was continued. During the year the "fence" made very little growth.

13. SWEET POTATO:

Cuttings of a yellow sweet potato (–U.P.R. No. 3), which is claimed to be superior to other varieties in vitamin content, were

imported from the Puerto Rico Department of Agriculture in December and planted in the nursery. Germination was good. When sufficient material becomes available trials will be carried out at various points.

There is a demand for this potato for canning in Puerto Rico.

14. Molasses Grass.

A small area in a hillside paddock was planted under Molasses or Wynne Grass (*Malinis Minutiflora*) for observation and trial under local conditions. The plants rooted successfully but growth was retarded by the dry conditions prevailing at the end of the year.

Section III.

EXTENSION AND DEVELOPMENT WORK.

15. Tortola Agricultural Station:

Work at the Station continued as in recent years. The principal activities were:—

(*a*) Maintenance of pedigree sires for stud purposes.
(*b*) Production of breeding stock for sale to farmers.
(*c*) Operation of a nursery to provide vegetable seedlings, fruit trees and other planting material.
(*d*) Carrying out of investigations (Section II).

The Station covers an area of sixty-eight (68) acres, utilized as follows:—

Guinea Grass paddocks	...	38·75 acres
Elephant Grass paddocks	...	9.50 ,,
Guatemala Grass paddocks	...	1·75 ,,
Mixed Grasses paddocks	...	17·00 ,,
Nursery	...	1·00 ,,
Total		68·00 acres

16. Cattle:

Ten (10) $\frac{3}{4}$ Red Poll x $\frac{1}{4}$ Senegal calves were born on the Station during the year. Of this number six (6) were bulls and four (4) heifers. There was one case of mastitis in the herd, and apart from this the herd maintained excellent condition. One (1) young bull was sold for stud purposes.

The herd now comprises:—

Bulls.	*Bull Calves.*	*Cows.*	*Heifers.*	*Total.*
2	9	16	14	41

17. Horses.

The thoroughbred stallion maintained condition but was not used as much as in 1952, and his services show a decrease of over 56%. Saddle horses are also cared for on the Station, three (3) of which are owned by the Department and six (6) by Government officers who are required to travel on duty.

18. Kentucky Jack Donkey.

The Jack was in good condition through the year, and was used for breeding both mares and janets. Stud services show a decrease of 29% over the preceding year.

19. Mules.

Two small mules are used for draught purposes on the Station. They gave useful service throughout the year.

20. Blackhead Persian Sheep:

These animals have a reputation for producing high quality mutton and of being suited to dry conditions. Local experience has shown that they are prone to worms and should be dewormed periodically.

There were five (5) births during the course of the year and all were ram lambs. Two ram lambs and one ewe lamb died and at the end of the year the herd total was 12.

21. Berkshire Pigs:

Three litters of pigs were farrowed giving a total of 17 piglets. Nine piglets were sold for breeding, and there were four (4) deaths. Total number of pigs at the Station 9.

22. Anglo-Nubian Goats:

These animals are also prone to worms and require to be treated periodically. For this Phenothiazine has given good results.

Seven (7) buck kids were born during the period under review, six (6) goats died and four (4) bucks were disposed of for breeding. Total number of goats now at the Station 8.

23. Stud Services.

Stud services of Government sires for the year were as follows:—

Stallion "Wise Medico"	...	17
Jack "Col. Dunway"	...	17
¾ Red Poll x ¼ Senegal Bull "Chamberlain"	...	8
" " " " " Bull "Commando"	...	12
Anglo-Nubian Buck Goat	...	7
Berkshire Boars	...	30

24. Distribution of Planting Material:

The propagation of ornamental and economic plants was carried out in the nursery at the Station.

Distribution and/or sales of plants, seed etc. during the year are set out below:—

Yam seed	...	100 lbs.
Sugar Cane Cuttings	...	36
Elephant grass cuttings	...	3,600
Cassava cuttings	...	200
Sweet potato cuttings (B. 44)	...	36,400
Grafted Mango plants	...	12
Cabbage seedlings	...	6,736
Tomato seedlings	...	1,728
Sweet pepper seedlings	...	520
Onion seedlings	...	5,200
Ornamental plants	...	100
Mahogany plants	...	146
Red Cedar plants	...	1,836

25. Soil and Water Conservation.

No new work was undertaken during the year. Existing stone barriers on the Station were maintained. The staff continues to give advice to farmers on this very important matter.

26. Improvements:

A pitless platform scale of a capacity of 5 tons for weighing livestock was installed at the Valley, Virgin Gorda. This is the third scale of its type which has been installed by the Department in recent years.

27. Tick Control:

Following the discovery of a single fever tick on a shipment of cattle to Puerto Rico and the consequent embargo on importation into Puerto Rico and the U. S. Virgin Islands, Dr. A. W. Vaughan, M.R.C.V.S. Veterinary Officer, St. Kitts, was invited to visit the British Virgin Islands and to advise on the situation. Surveys indicated that the fever tick (*Boophilus annulatus*) was present in certain areas and it was agreed that efforts should be directed to the eradication of this parasite. Stock owners were encouraged to dip at regular intervals. The five dipping vats on the mainland which were in use were overhauled to deal with the increased demands. Towards the end of the year work was commenced on the restoration of two other dipping vats at Belle Vue and Carrot Bay which had fallen into disrepair. Special funds were allocated for the above work.

28. Visits to Farms:

Farms were visited by members of the Staff for inspection of land offered as security for loans for pasture improvement and for progress reports afterwards. Visits were also made for hog inoculations and for treatment of sick or injured animals as necessary. On such occasions the opportunity was taken to advise on soil conservation, care and management of livestock and to point out the advantages to be obtained from the use of growing fence posts of gliricidia which provide both shade and fodder.

29. Credit and Marketing:

The grant from Development and Welfare Funds for loans to farmers for pasture improvement has proved a great boon to the livestock industry. The original grant was £5,000 ($24,000 B.W.I.) but during the year the Secretary of State approved a further grant of £1,000 making a total of £6,000 ($28,800 B.W.I.).

Loans issued in 1952 and 1953 were as follows:—

	1952—78 Loans		
		$	
Cash	...	17,681.68	
Barbed wire	...	877.50	$18,559.18
	1953—24 Loans		
		$	
Cash	...	4,442.08	
Barbed wire	...	361.03	4,803.11
Total	...		$23,362.29

Amounts repaid to date (31st December, 1953) amounted to $2,017.51.

The Trade and Production Committee serves as Loan Board and advises the Commissioner on all applications.

There are no organised marketing facilities in the Presidency. The Chairman of the Trade and Production Committee however rendered invaluable assistance in negotiating with the cattle traders from the French West Indies. The Department is always seeking new markets.

30. Agricultural Shows:

Successful Agricultural Shows took place in November at the following centres:—

(*a*) The Valley, Virgin Gorda
(*b*) Great Harbour, Jost Van Dykes
(*c*) Road Town, Tortola

At each centre the cattle exhibits were good and the standard high. Virgin Gorda exhibited the best pigs and Road Town the best poultry. Good sheep and goats were shown at Road Town and at Virgin Gorda. There were eighteen (18) classes of livestock and poultry (apart from horses and mules which were exhibited only at Road Town) and the number of exhibits in these classes was:—

Virgin Gorda	84
Tortola	82
Jost Van Dykes	55

Excellent fields of guinea grass were seen in all the islands and small plots of elephant grass in Jost Van Dykes and in Tortola.

Fruit and vegetables and handicrafts were exhibited only at Road Town. The standard was good but the numbers were disappointingly few.

The type and standard of cattle, horses, mules, goats and pigs indicate the progress made by the use of stud sires and breeding stock provided by the Department over a number of years.

31. Staff Training Courses:

No courses were held during the year. Provision was however made for a junior officer to be sent to the Caribbean Farm Institute for training in 1954.

The Superintendent of Agriculture, Mr. M. Winter, left for the United Kingdom in October to pursue a course of training in Animal Husbandry at the Northampton Institute of Agriculture.

32. Coronation Celebrations:

In connection with the celebration of the Coronation of Her Majesty Queen Elizabeth II, the Department assisted by decorating the Recreation Ground and in organising the Firework Display and Bon Fires. Mahogany seedlings which were used for the Tree Planting Ceremony originated in the departmental nursery.

33. Holding Ground:

In 1952 application was made for a C. D. & W. Grant in respect of:—

> a "holding ground" which will enable the Agricultural Department to purchase cattle destined for export and to sell them to other farmers in the Presidency.

The application was approved and the sum of £1,500 ($7,200.00 B.W.I.) provided under Scheme D.1921 to cover:—

(*a*) Cost of bringing 20 acres into permanent pasture, cleaning, fencing and planting grass.

(*b*) Water supply for holding ground including concrete storage tank, pump, pipe and fittings.

Work was commenced in October, 1952, and by the end of 1953 the area had been fenced, cleared and planted under guinea grass. Subdivision of the area into paddocks and provision of water supply should be completed early in 1954.

34. Miscellaneous Activities:

The following other activities of the Department were pursued during the year:—

(1) Clearing and maintenance of the old cemetery at Johnson's Ghut.

(2) Maintenance of fences and care of trees of the Recreation Ground.

(3) Care of trees at the Hospital.

(4) Care of trees and shrubs at the Market Square.

(5) Issue of licences for the importation of animals into the Presidency.

(6) Inspection of all animals imported under (5).

35. Visitors:

Visitors to the Department include the following:—

His Excellency Sir Kenneth Blackburne, K.C.M.G., O.B.E., Governor of the Colony.
Lord Munster of the Colonial Office
Mr. James W. Vernon of the Colonial Office
His Honour Mr. J. A. C. Cruikshank, Commissioner of the B.V.I.
His Honour, Mr. E. A. Evelyn, Acting Commissioner of the B.V.I.
The Honourable H. R. Penn, Chairman, Trade & Production Committee

Dr. A. W. Vaughan, M.R.C.V.S., Veterinary Officer, St. Kitts-Nevis—Anguilla.
Dr. R. von Decken-Luers, Veterinary Officer of the U.S.V.I.

36. Acknowledgements:

The Department records its thanks and appreciation to the farmers and all others for their assistance and cooperation.

We are deeply grateful to all those who so kindly donated prizes for the Agricultural Shows, and to the judges of the various classes.

The Department is particularly grateful to Dr. A. W. Vaughan for his valued advice and assistance in connection with ticks and the diagnosis and treatment of Anaplasnosis.

The Acting Agricultural Officer pays tribute to the staff for their support throughout the year.

SECTION IV

37. Colonial Development & Welfare Schemes:

Scheme D. 1921—Pasture Extension of Government Stock Farm which provides the sum of £1,500 ($7,200.00 B.W.I.) for the purpose outlined in paragraph 33 was in operation during the year.

SECTION V

38. Summary of Agricultural Legislation:

1. The Wild Birds Protection Ordinance, 1914, was amended by the Wild Birds Protection (Amendment) Ordinance, 1953, (No. 3 of 1953), the object of the bill being to protect certain wild birds outside the close period.

2. The Wild Birds (Bag-limit) Order, 1953, establishes bag limits for specified wild birds.

3. The Plant Protection Regulations, 1953 (S. R. & O. No. 8 of 1953) controls the importation of fruit, vegetables, seeds, etc., into the Presidency.

George L. Bellot,
Acting Superintendent of Agriculture.

AGRICULTURAL DEPARTMENT, Tortola, British Virgin Islands

RETURN OF RAINFALL

from January, 1944, to December, 1953

Month	1944.	1945.	1946.	1947.	1948.	1949.	1950.	1951.	1952.	1953.	10 year monthly average.
January ...	2.80	2.02	2.83	5.65	2.83	1.45	5.04	1.74	6.49	3.35	3.42
February ...	1.36	2.17	2.52	3.09	1.60	2.59	9.32	.97	.83	1.01	2.54
March ...	.84	.58	1.00	1.55	.84	4.29	1.69	.46	1.48	2.94	1.56
April ...	1.57	1.97	.61	.61	1.52	1.27	3.82	1.11	7.38	1.11	2.09
May ...	8.13	7.12	3.46	2.84	5.42	2.70	.20	9.56	1.84	1.37	4.26
June ...	2.67	1.88	1.53	2.56	6.00	7.06	1.67	5.37	2.72	8.60	3.80
July ...	6.15	4.92	3.17	1.11	5.66	3.95	3.13	4.91	9.15	3.32	4.54
August ...	4.98	6.06	3.30	2.84	3.83	5.18	7.85	4.58	4.40	4.58	4.76
September ...	8.23	3.41	7.36	17.38	4.29	12.38	7.35	10.80	14.44	13.05	9.86
October ...	5.34	6.79	14.24	10.05	8.19	7.90	10.41	6.06	4.26	2.04	7.52
November ...	5.30	5.74	4.25	2.52	6.68	3.68	7.67	3.50	8.61	3.62	5.15
December ...	3.94	1.43	1.66	4.39	3.97	6.51	1.93	7.36	1.54	2.72	3.54
Total ...	51.31	44.09	45.93	54.59	51.00	58.96	60.08	56.42	63.14	47.71	53.04
10 year mean											53.04

APPENDIX II

Principal Exports from the British Virgin Islands

Commodity	1949		1950		1951		1952		1953		Average value for previous four years
	Quantity	Value £	Quantity	Value £	Quantity	Value £	Quantity	Value £	Quantity	Value £	
Limes ...		54		34		152		85		44	81
Tomatoes ...		7		11		9		24		21	13
Coconuts ...		58		519		603		748		646	482
Livestock ...		24283		17974		57903		40457		30360	35154
Rum ...					20	14		77	424	277	28
Other Agricultural Products* ...		7084		7927		7219		5773		6624	7001
Fish ...		1700		1614		1609		2220		3367	1786
Total ...		33186		28079	20	67509		49384	424	52159	44545

*Note—Includes forest products, fruit, vegetables and ground provisions.

APPENDIX III

VALUE OF IMPORTS OF CERTAIN COMMODITIES

INTO THE

BRITISH VIRGIN ISLANDS

IN HUNDREDS OF POUNDS STERLING (£ 00)

Foodstuffs for human consumption	*1949*	*1950*	*1951*	*1952*	*1953*	*Average for previous 4 years*
Wheaten Flour	107	131	144	126	179	127
Pulses	3	3	4	5	13	4
Rice	8	9	16	16	22	12
Cornmeal (Maize)	9	10	9	12	12	10
Bread & Biscuits	4	6		8	10	5
Butter & Substitutes	9	12	11	12	15	11
Lard & Substitutes	13	16	18	27	20	19
Edible Oils	2	2	2	2	5	2
Preserved Milk	4	6	8	4	19	6
Cheese	6	8	7	7	9	7
Preserved Meat	10	12	13	13	19	12
Preserved Fish	4	6	7	5	8	6
Fruit & Vegitables	9	15	11	11	19	12
Coffee	3	3	3	3	6	3
Tea	1	1	1	1	1	1
Cocoa	2	4	4	4	4	4
Sugar	62	65	77	82	109	72
Total	256	309	371	338	470	313
Animal Feeding Stuffs	2	4	7	8	11	5
Fertilizers	—	—	—	—	—	—